

**PCT/US99/09366**

## DIAGNOSTIC MARKERS OF HUMAN FEMALE INFERTILITY

This application is a conversion of a United States Provisional Application filed April 29, 1998, Serial No. 60/083,418. Continuation in Part of application Serial No. 08/919,421 filed 8/27/97 which claims benefit of US Provisional Application No. 60/025,800 filed August 27, 1996.

This invention was made with Government support under Grant Number (s) CA46866 awarded by the National Institutes of Health (NIH) and HD 35041 and HD 34824 from the National Cooperative Program on Markers of Uterine receptivity for Blastocyst Implantation. The Government has certain rights in the invention.

## FIELD OF THE INVENTION

The present invention relates to diagnostic and prognostic markers of endometrial irregularities, particularly infertility. More specifically, the present invention relates to diagnostic markers which can be used in treatment of infertility, kits for timing conception, contraception, and for treatment of excessive bleeding conditions.

Human endometrium is a unique tissue that undergoes sequential phases of proliferation, secretory changes, tissue shedding and bleeding during menstruation. After ovulation, during a defined period designated as